Partial differential operators are defined by

$$\partial_{0,t} = \frac{\partial}{\partial \dot{B}(t)} = \mathcal{U}^{-1} \frac{\delta}{\delta a_0 \mathrm{i} \xi(t)} \mathcal{U} \quad \text{and} \quad \partial_{k,t} = \frac{\partial}{\partial \dot{P}_k(t)} = \mathcal{U}^{-1} \frac{\delta}{\delta m_k \, \mathrm{e}^{a_k \mathrm{i} \xi(t)}} \mathcal{U},$$

where $B$ and $P_k$'s are the Brownian and the Poisson components of $P$. Denoting the adjoint operators by $\partial^*_{0,t}$ and $\partial^*_{k,t}$, the multiplication operator by $\dot{P}(t)\,\cdot$ is expressed as

$$\dot{P}(t) \cdot = a_0(\partial^*_{0,t} + \partial_{0,t}) + \sum_{k=1}^{K} a_k m_k (\partial^*_{k,t} + 1)(\partial_{k,t} + 1).$$

**On Gaussian Reciprocal Processes**

Jean Claude Massé, *Université Laval, Canada*

A reciprocal process is defined as a process whose behavior inside an interval is independent of its behavior outside the same interval, given the endpoints states. This class of processes has been defined by B. Jamison who undertook to identify them in the real Gaussian case, obtaining partial results. The reciprocity property is a natural extension of the Markov field property, and it leads directly to the strict Markov field property when we attempt to define it for random fields. In this paper, we establish a representation theorem linking closely Gaussian reciprocal vector processes to Gaussian Markov vector processes. A general method of building reciprocal processes follows. Several examples are given.

**An Iterated Logarithm Law for the Maxima of a StronglyDependent Isotropic Gaussian Random Field**

William Peter McCormick, *University of Georgia, USA*

The growth of the maxima for a class of isotropic Gaussian random fields is studied. The class of processes considered has a stochastic integral representation which in the strongly dependent case is most useful in elucidating the nature of the strong dependence. This work generalizes previous work on the growth rate of the maxima of Polya processes.

**Integral Transformations Associated with Lévy's Brownian Motion**

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From a well-known expression of Lévy's Brownian motion $X = \{X(x);\, x \in R^n\}$ discovered by Chentsov, we are led to introduce a pair of integral transformations